## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

10/743.639A
1.F4/6
11/1/05

## ENTERED



WAT

FWO

RAW SEQUENCE LISTING DATE: 11/01/2005
PATENT APPLICATION: US/10/743,639A TIME: 14:47:43

Input Set: A:\18003-D1 Sequence Listing 20051027.txt
Output Set: N:\CRF4\11012005\J743639A.raw

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3 <110> APPLICANT: Bell, John C.
 4
         Sonenberg, Nahum
         Stojdl, David F.
 5
 6
         Brown, Earl G.
 7
         Atkins, Harold L.
         Marius, Ricardo M.
 8
         Lichty, Brian D.
 9
10
         Knowles, Shane B.
12 <120> TITLE OF INVENTION: ONCOLYTIC VIRUS
14 <130> FILE REFERENCE: 18003-D1
16 <140> CURRENT APPLICATION NUMBER: US 10/743,639A
17 <141> CURRENT FILING DATE: 2003-12-22
19 <150> PRIOR APPLICATION NUMBER: US 09/664,444
20 <151> PRIOR FILING DATE: 2000-09-18
22 <150> PRIOR APPLICATION NUMBER: 60/287,590
23 <151> PRIOR FILING DATE: 1999-09-17
25 <160> NUMBER OF SEQ ID NOS: 52
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31 <212> TYPE: PRT
32 <213> ORGANISM: Artificial Sequence
34 <220> FEATURE:
35 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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Input Set : A:\18003-D1 Sequence Listing 20051027.txt Output Set: N:\CRF4\11012005\J743639A.raw 63 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide 66 <400> SEQUENCE: 3 67 Cys His Gly Leu His Ser Asn Met Arg His Cys 71 <210> SEO ID NO: 4 72 <211> LENGTH: 9 73 <212> TYPE: PRT 74 <213> ORGANISM: Artificial Sequence 76 <220> FEATURE: 77 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 78 peptide 80 <400> SEQUENCE: 4 81 Cys His His His Arg Leu Asn Cys 82 1. 85 <210> SEQ ID NO: 5 86 <211> LENGTH: 9 87 <212> TYPE: PRT 88 <213> ORGANISM: Artificial Sequence 90 <220> FEATURE: 91 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide 92 94 <400> SEQUENCE: 5 95 Cys His Ser His His His Arg Gly Cys 99 <210> SEQ ID NO: 6 100 <211> LENGTH: 9 101 <212> TYPE: PRT 102 <213> ORGANISM: Artificial Sequence 104 <220> FEATURE: 105 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide 106 108 <400> SEQUENCE: 6 109 Cys Trp Asp His His Asn His His Cys 110 1 113 <210> SEQ ID NO: 7 114 <211> LENGTH: 9 115 <212> TYPE: PRT 116 <213> ORGANISM: Artificial Sequence 118 <220> FEATURE: 119 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide 122 <400> SEQUENCE: 7 123 Cys Asp Asn Asn His His His Cys 127 <210> SEQ ID NO: 8 128 <211> LENGTH: 10 129 <212> TYPE: PRT 130 <213> ORGANISM: Artificial Sequence

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143 <212> TYPE: DNA
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149 tacatcaata ctacaaaaag tttgtcagat ctaagaggat atgtctacca aggcctcaaa 180
150 tccggaaatg tatcaatcat acatgtcaac agctacttgt atggagcatt aaaggacatc 240
151 cggggtaagt tggataaaga ttggtcaagt ttcggaataa acatcgggaa agcaggggat 300
152 acaatcggaa tatttgacct tgtatccttg aaagccctgg acggcgtact tccagatgga 360
153 gtateggatg ettecagaac eagegeagat gacaaatggt tgeetttgta tetaettgge 420
154 ttatacagag tgggcagaac acaaatgcct gaatacagaa aaaagctcat ggatgggctg 480
155 acaaatcaat gcaaaatgat caatgaacag tttgaacctc ttgtgccaga aggtcgtgac 540
156 atttttgatg tgtggggaaa tgacagtaat tacacaaaaa ttgtcgctgc agtggacatg 600
157 ttcttccaca tgttcaaaaa acatgaatgt gcctcgttca gatacggaac tattgtttcc 660
158 agattcaaag attgtgctgc attggcaaca tttggacacc tctgcaaaat aaccggaatg 720
159 tctacagaag atgtaacgac ctggatcttg aaccgagaag ttgcagatga aatggtccaa 780
160 atgatgette caggecaaga aattgacaag geegatteat acatgeetta titgategae 840
161 tttggattgt cttctaagtc tccatattct tccgtcaaaa accctgcctt ccacttctgg 900
162 gggcaattga cagctettet geteagatee accagageaa ggaatgeeeg acageetgat 960
163 gacattgagt atacatetet tactacagea ggtttgttgt acgettatge agtaggatee 1020
164 tctgccgact tggcacaaca gttttgtgtt ggagataaca aatacactcc agatgatagt 1080
165 accggaggat tgacgactaa tgcaccgcca caaggcagag atgtggtcga atggctcgga 1140
166 tggtttgaag atcaaaacag aaaaccgact cctgatatga tgcagtatgc gaaaagagca 1200
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174 <213> ORGANISM: Vesicular stomatitis virus
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178 aatgaggatc cagtggaata cccggcagat tacttcagaa aatcaaagga gattcctctt 120
179 tacatcaata ctacaaaaag tttgtcagat ctaagaggat atgtctacca aggcctcaaa 180
180 tccggaaatg tatcaatcat acatgtcaac agctacttgt atggagcatt gaaggacatc 240
181 cggggtaagt tggataaaga ttggtcaagt ttcggaataa acatcgggaa ggcaggggat 300
182 acaatcggaa tatttgacct tgtatccttg aaagccctgg acggtgtact tccagatgga 360
183 gtateggatg ettecagaae eagegeagat gacaaatggt tgeetttgta tetaettgge 420
184 ttatacagag tgggcagaac acaaatgcct gaatacagaa aaaggctcat ggatgggctg 480
185 acaaatcaat gcaaaatgat caatgaacag tttgaacctc ttgtgccaga aggtcgtgac 540
186 atttttgatg tgtggggaaa tgacagtaat tacacaaaaa ttgtcgctgc agtggacatg 600
187 ttcttccaca tgttcaaaaa acatgaatgt gcctcgttca gatacggaac tattgtttcc 660
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189 tctacagaag atgtaacgac ctggatcttg aaccgagaag ttgcagatga gatggtccaa 780
190 atgatgette caggecaaga aattgacaag geegatteat acatgeetta titgategae 840
191 tttggattgt cttctaagtc tccatattct tccgtcaaaa accctgcctt ccacttctgg 900
192 gggcaattga cagctcttct gctcagatcc accagagcaa ggaatgcccg acagcctgat 960
193 gacattgagt atacatetet tactacagea ggtttgttgt acgettatge agtaggatee 1020
194 tctgctgact tggcacaaca gttttgtgtt ggagatagca aatacactcc agatgatagt 1080
195 accggaggat tgacgactaa tgcaccgcca caaggcagag atgtggtcga atggctcgga 1140
196 tqqtttqaaq atcaaaacaq aaaaccqact cctqatatqa tqcaqtatqc qaaacqaqca 1200
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209 tacatcaata ctacaaaaag tttgtcagat ctaagaggat atgtctacca aggcctcaaa 180
210 teeggaaatg tateaateat acatgteaac agetaettgt atggageatt gaaggacate 240
211 cggggtaagt tggataaaga ttggtcaagt ttcggaataa acatcgggaa ggcaggggat 300
212 acaatcqqaa tatttqacct tqtatccttq aaaqccctqq acqqtqtact tccaqatqqa 360
213 qtatcqqatq cttccaqaac caqcqcaqat qacaaatqqt tqcctttgta tctacttggc 420
214 ttatacagag tgggcagaac acaaatgcct gaatacagaa aaaggctcat ggatgggctg 480
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218 agattcaaag attgtgctgc attggcaaca tttggacacc tctgcaaaat aaccggaatg 720
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222 gggcaattga cagctcttct gctcagatct accagagcaa ggaatgcccg acagcctgat 960
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226 tggtttgaag atcaaaacag aaaaccgact cctgatatga tgcagtatgc gaaacgagca 1200
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234 <213> ORGANISM: Vesicular stomatitis virus
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239 tacatcaata ctacaaaaag tttgtcagat ctaagaggat atgtctacca aggcctcaaa 180
240 teeggaaatg tateaateat acatgteaac agetaettgt atggageatt gaaggacate 240
241 cqqqqtaagt tggataaaga ttggtcaagt ttcggaataa acatcgggaa ggcaggggat 300
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  245 acaaatcaat gcaaaatgat caatgaacag tttgaacctc ttgtgccaga aggtcgtgac 540
  246 atttttgatg tgtggggaaa tgacagtaat tacacaaaaa ttgtcgctgc agtggacatg 600
  247 ttcttccaca tqttcaaaaa acatqaatqt qcctcqttca qatacqqaac tattqtttcc 660
  248 agattcaaag attgtgctgc attggcaaca tttggacacc tctgcaaaat aaccggaatg 720
  249 totacagaag atgtaacgac otggatottg aaccgagaag ttgcagatga gatggtocaa 780
  250 atgatgette caggecaaga aattgacaag geegatteat acatgeetta titgategae 840
  251 tttggattgt cttctaagtc tccatattct tccgtcaaaa accctgcctt ccacttctgg 900
  252 gggcaattga cagctcttct gctcagatcc accagagcaa ggaatgcccg acagcctgat 960
  253 gacattgagt atacatctct tactacagca ggtttgttgt acgcttatgc agtaggatcc 1020
  254 tctgctgact tggcacaaca gttttgtgtt ggagatagca aatacactcc agatgatagt 1080
  255 accggaggat tgacgactaa tgcaccgcca caaggcagag atgtggtcga atggctcgga 1140
  256 tggtttgaag atcaaaacag aaaaccgact cctgatatga tgcagtatgc gaaacgagca 1200
  257 gtcatgtcac tgcaaggcct aagagagaag acaattggca agtatgctaa gtcagaattt 1260
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  263 <212> TYPE: DNA
  264 <213> ORGANISM: Vesicular stomatitis virus
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  267 <221> NAME/KEY: modified base
  268 <222> LOCATION: (1)..(1029)
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  273 gataaagatt ggtcaagttt cggaataaac atcgggaagg caggggatac aatcggaata 120
  274 tttgaccttg tatccttgaa agccctggac ggtgtacttc cagatggagt atcggatgct 180
  275 tccagaacca gcgcagatga caaatggttg cctttgtatc tacttggctt atacagagtg 240
  276 ggcagaacac aaatgcctga atacagaaaa aggctcatgg atgggctgac aaatcaatgc 300
  277 aaaatgatca atgaacagtt tgaacctctt gtgccagaag gtcgtgacat ttttgatgtg 360
  278 tggggaaatg acagtaatta cacaaaaatt gtcgctgcag tggacatgtt cttccacatg 420
  279 ttcaaaaaac atgaatgtgc ctcgttcaga tacggaacta ttgtttccag attcaaagat 480
  280 tgtgctgcat tggcaacatt tggacacctc tgcaaaataa ccggaatgtc tacagaagat 540
  281 gtaacgacct ggatcttgaa ccgagaagtt gcagatgaga tggtccaaat gatgcttcca 600
  282 ggccaagaaa ttgacaaggc cgattcatac atgccttatt tgatcgactt tggattgtct 660
  283 totaagtote catattette egteaaaaac cetgeettee acttetgggg geaattgaet 720
-> 284 gacattgagt atacatctcn tactacagca ggtttgttgt acgcttatgc agtaggatcc 780
-> 285 tctgctgact tggcacanca gttttgtgtt ggagatagca aatacactcc agatgatagt 840
  286 accggaggat tgacgactaa tgcaccgcca caaggcagag atgtggtcga atggctcgga 900
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  294 <212> TYPE: PRT
  295 <213> ORGANISM: Vesicular stomatitis virus
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298 Met Ser Val Thr Val Lys Arg Ile Ile Asp Asn Thr Val Ile Val Pro

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## ease Note:

ego of n and/or Xaa have been detected in the Sequence Listing. Please review the quence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

#:13; N Pos. 740,798
#:17; Xaa Pos. 247,266
#:37; N Pos. 144

#:42; Xaa Pos. 6,48

#:44; Xaa Pos. 430

#:49; N Pos. 3810,3831 #:51; Xaa Pos. 22,51

#:52; Xaa Pos. 1270,1277

## VERIFICATION SUMMARY

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Input Set : A:\18003-D1 Sequence Listing 20051027.txt

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284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:720
285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:780
512 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:240
515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:256
1350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:120
1565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
1571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:32
1764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:416
2179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:3780
2641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:16
2647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:48
3217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:1264